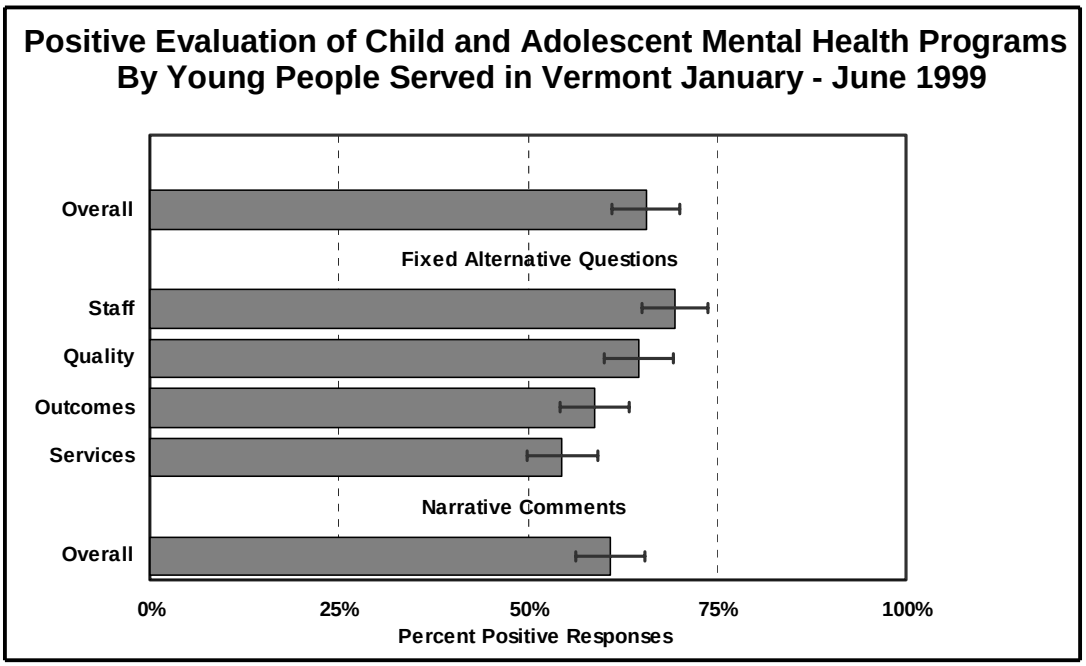
EVALUATION OF CHILD AND ADOLESCENT MENTAL HEALTH PROGRAMS

By Young People Served in Vermont January - June 1999

TECHNICAL REPORT



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August 30, 2000

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The authors of this report wish to thank all those who contributed to this project. This work could not have been completed without the help of Lisa Gilman (data collection), Kim Pandiani (data coding and data entry) and the staff of the Child and Family Unit of the Department of Developmental and Mental Health Services. The authors would also like to thank the young people who took the time to evaluate and comment on the Child and Adolescent Mental Health Programs provided by the Community Mental Health Centers in Vermont.

FOREWORD

The 1999 survey of young people served by Child and Adolescent Mental Health Programs in Vermont is one part of a larger effort to monitor community mental health program performance from the perspective of service recipients and other stakeholders. These evaluations will be used in conjunction with other stakeholder assessments and with measures of program performance drawn from existing data bases to provide a more complete picture of the performance of local community mental health programs. The combined results of these evaluations will allow a variety of stakeholders to systematically compare the performance of community based mental health programs in Vermont, and to support local programs in their ongoing quality improvement process.

The results of this survey should be considered in light of previous consumer and stakeholder based evaluations of community mental health programs in Vermont, and in conjunction with the results of consumer and stakeholder surveys that will be conducted in the future. Previous assessments of Child and Adolescent Mental Health Programs include 1994 and 1997 surveys that asked school personnel to assess the quality of services they received from their local Child and Adolescent Mental Health Programs. In the future, these findings may be compared to the results of a recently completed survey of Children's case workers from the Vermont Department of Social and Rehabilitation Services, and to the results of planned surveys of parents of children served and school personnel.

These evaluations should also be considered in light of measures of levels of access to care, service delivery patterns, service system integration, and treatment outcomes that are based on analyses of existing data bases. Many of these indicators are available in the annual DDMHS Fact Books and Statistical Reports that are available from the DDMHS Research and Statistics Unit.

This approach to program evaluation assumes that program performance is a multidimensional phenomenon which is best understood on the basis of a variety of different indicators that focus on different aspects of program performance. This report focuses on one very important measure of the performance Vermont's Child and Adolescent Mental Health Programs, the subjective evaluations of the young people who were served.

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EVALUATION OF CHILD AND ADOLESCENT MENTAL HEALTH PROGRAMS

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PROJECT OVERVIEW AND SUMMARY OF RESULTS

During the fall of 1999 and winter of 2000, the Child and Family Unit of the Vermont Department of Developmental and Mental Health Services asked young people to evaluate Child and Adolescent Mental Health Programs in Vermont's Community Mental Health Centers. All young people aged 14-18 who received Medicaid reimbursed services from these Centers during January through June of 1999 were sent questionnaires that asked for their opinion of various aspects of these services. A total of 314 young people (28% of those with known addresses) returned completed questionnaires. The survey instrument was based on the MHSIP Consumer Survey developed by a multi-state work group and modified as a result of input from Vermont stakeholders (see Appendix II). The Vermont consumer survey was designed to provide information that would help stakeholders to compare the performance of Child and Adolescent Mental Health Programs in Vermont.

Methodology

In order to facilitate comparison of Vermont's ten Child and Adolescent Mental Health Programs, young people's responses to twenty-two fixed alternative items and four open-ended questions were combined into six scales. Five of the scales were based on responses to fixed alternative questions. These scales focus on ***overall*** consumer evaluation of program performance, and evaluation of program performance with regard to ***outcomes, quality***, ***services***, and ***staff***. The final scale, based on responses to open-ended questions, includes frequency of ***positive comments*** about program performance. In order to provide an unbiased comparison across programs, survey results were statistically adjusted to remove the effect of dissimilarities among the client populations served by different community programs. Measures of statistical significance were also adjusted to account for the proportion of all potential subjects who responded to the survey.

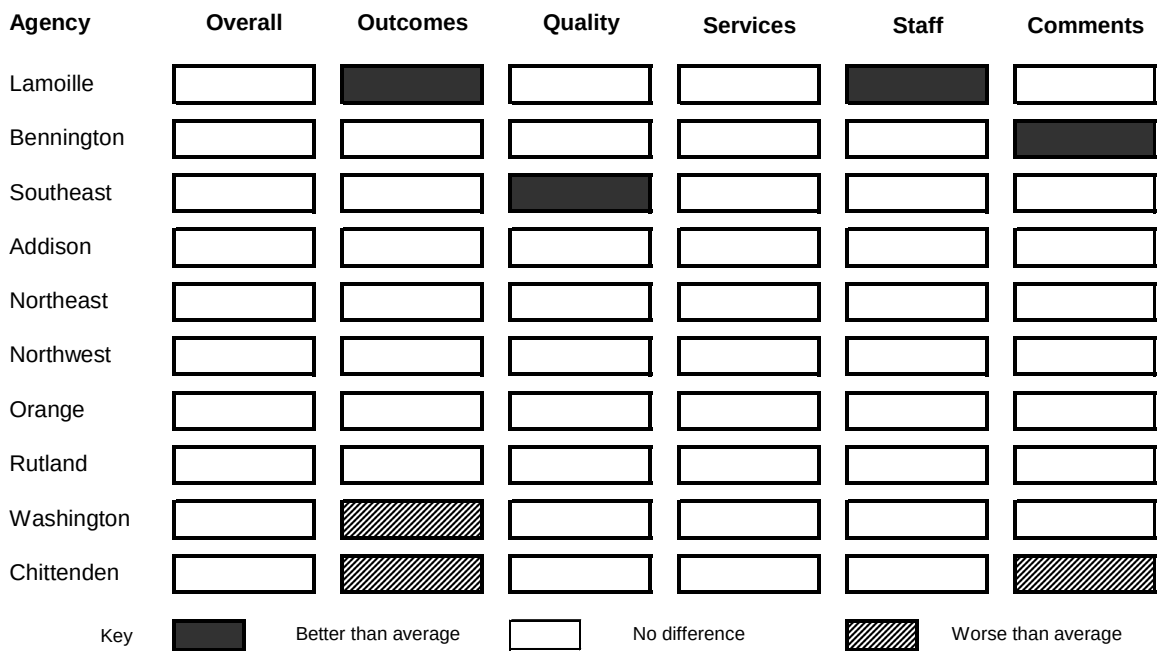
Overall Results

The majority of young people served by Child and Adolescent Mental Health Programs in Vermont rated their programs favorably. On our *overall* measure of program performance, 66% of the respondents evaluated the programs positively. Some aspects of program performance, however, were rated more favorably than other aspects. Fixed alternative items related to *staff*, for instance, received more favorable responses (70% favorable) than items related to *services* (55% favorable*)* or *outcomes* (59% favorable). *Positive comments* about program performance were offered by 61% of the young people.

Overview of Differences Among Programs

In order to compare young people's evaluations of Child and Adolescent Mental Health Programs in the ten Community Mental Health Centers, young people's ratings of individual programs on each of six composite scales were compared to the statewide average for each scale. The results of this survey indicate that there were significant differences in consumers' evaluations of some of the state's ten Child and Adolescent Community Mental Health Programs.

Positive Evaluation of Child and Adolescent Mental Health Programs By Young People Served in Vermont January - June 1999



The Child and Adolescent Mental Health Program in Lamoille County received the most favorable consumer assessment in the state, scoring better than the statewide average on two of the six scales. The Child and Adolescent Mental Health Programs in Bennington and Southeast each scored better than average on one of the six scales. Young people's evaluations of five of the other programs were not statistically different from the statewide average on any of the scales. The Child and Adolescent Mental Health Program in Washington County was rated below the statewide average on one scale and the program in Chittenden County below on two scales.

The results of this evaluation of Child and Adolescent Mental Health Programs in Vermont need to be considered in conjunction with other measures of program performance in order to obtain a balanced picture of the quality of care provided to young people with mental health needs in Vermont.

STATEWIDE RESULTS

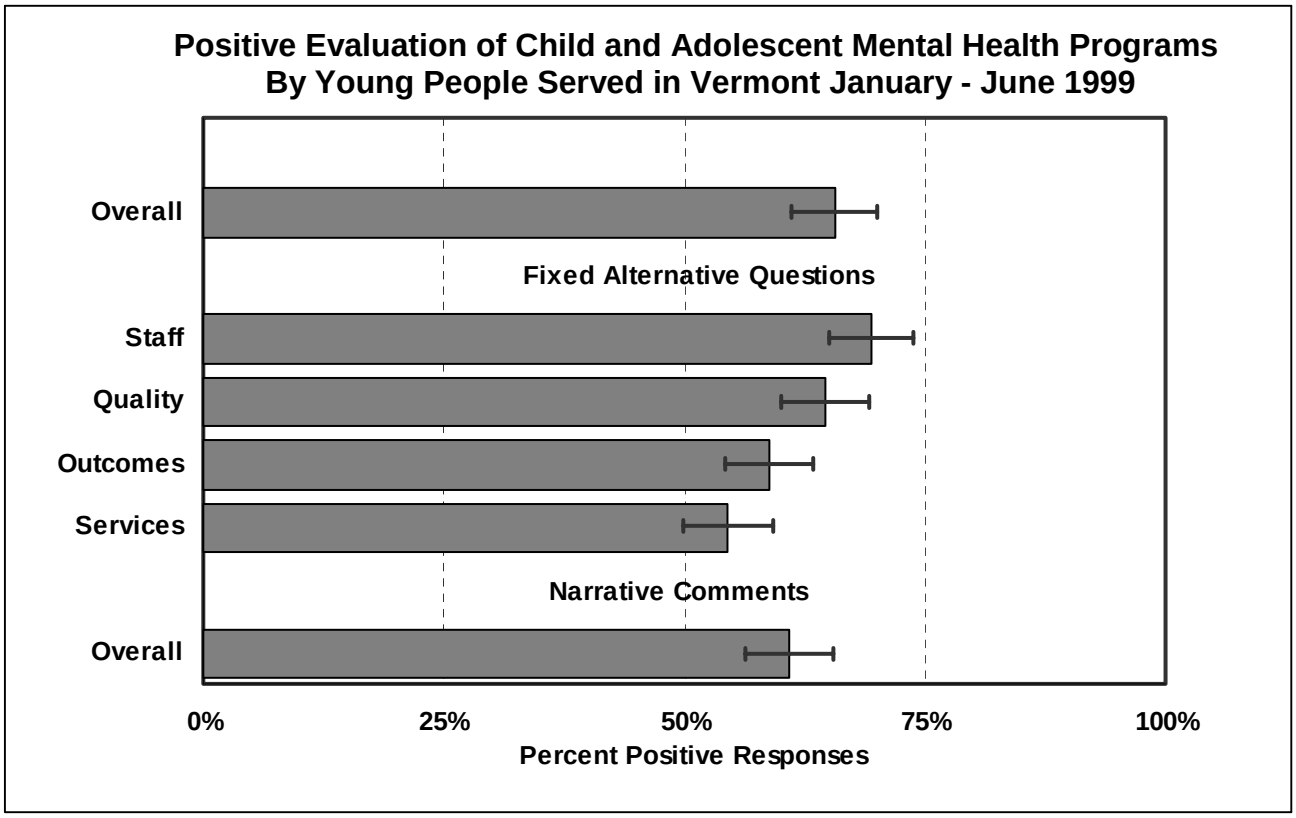
The majority of young people served by Child and Adolescent Mental Health Programs at Community Mental Health Centers in Vermont rated their programs favorably. (Appendix IV provides an item by item summary of responses to the fixed alternative questions.)

The most favorably rated items were “The staff listened to what I had to say” (77% positive) and "I liked the staff who worked with me" (76%). Other favorably rated aspects of care included the convenience of the location of services (72%), and two items relating to respect from staff (72% each).

Sixty-six percent of the young people agreed or strongly agreed that “The services I received were helpful to me.”

The least favorably rated items related to the amount of services received and involvement in choice of services. Forty percent indicated that they did not receive more services than they wanted and 46% did not want more services than they got. Only 50% felt that they helped to choose their services.

There were significant differences in young people's ratings of Child and Adolescent Mental Health Programs on the six scales derived from responses to the Vermont survey. More than 66% of consumers rated programs favorably *overall,* and the *staff* scale received significantly more favorable responses than the *services* scale (70% vs. 55% favorable). *Positive comments* about program performance were offered by 61% of the consumers.



DIFFERENCES AMONG PROGRAMS

Young people's evaluations of Child and Adolescent Mental Health Programs at Vermont's ten Community Mental Health Centers on the six scales that were built from survey responses were generally favorable. In order to provide a comprehensive overall evaluation of program performance, consumer ratings of each program were compared to the statewide average for each of the scales (pages 29-37). These comparisons showed some variation between providers. Combined, these results provide a succinct portrait of young people's evaluations of Child and Adolescent Mental Health Programs in Vermont.

The Child and Adolescent Mental Health Program at Lamoille County Mental Health Services (Lamoille) in the period January to June 1999 was the most favorably rated in Vermont. Young people receiving mental health services at Lamoille rated their program better than the statewide average on two of the six scales (*Outcomes* and *Staff).*

The Child and Adolescent Mental Health Programs at United Counseling Services (Bennington), and Health Care and Rehabilitation Services of Southeastern Vermont (Southeast) were each rated better than the statewide average on one scale. Bennington was rated higher on the frequency of *Positive Comments*, and Southeast was rated higher on *Quality*.

The Child and Adolescent Mental Health Programs were not rated differently from the statewide average on any of the six scales at The Counseling Service of Addison County (Addison), Northeast Kingdom Mental Health (Northeast), Northwestern Counseling and Support Services (Northwest), Clara Martin Center (Orange), and Rutland Mental Health Services (Rutland).

Washington County Mental Health Services (Washington) Child and Adolescent Mental Health Program was rated below average on one scale (*Outcomes)*.

The Child and Adolescent Mental Health Program at the Howard Center for Human Services (Chittenden) was the least favorably rated in Vermont. Young people receiving Child and Adolescent Mental Health Services at Chittenden rated their program less favorably than the statewide average on two of the six scales (*Outcomes* and *Positive Comments*).

Overall Consumer Evaluation

The measure of overall consumer satisfaction with each of the ten Community Mental Health Center Child and Adolescent Mental Health Programs that was used in this study is based on young people's responses to 22 fixed alternative questions. The composite measure of overall consumer satisfaction was created by counting the number of items with positive responses. (For details of scale construction, see Appendix V.) Young people's overall ratings of the individual Community Mental Health Centers did not differ significantly from the statewide average (see pages 29 and 31).

Consumer Evaluation of Outcomes

Young people's perception of the outcomes of the services of the Child and Adolescent Mental Health Programs, our second composite measure, was derived from responses to five fixed alternative questions:

As a result of the services I received:

I am better at handling daily life.
I get along better with my family.
I get along better with friends and other people.
I am doing better in school and/or at work.
I am better at handling stressful situations.

Statewide, 59% of the young people rated their Child and Adolescent Mental Health Programs favorably on the Outcomes scale.

Three Community Mental Health Centers were significantly different from the statewide average on this scale. The consumers of the Child and Adolescent Mental Health Program at Lamoille rated their outcomes more favorably than average, with 96% of the respondents reporting that their handling of daily life and relationships were better as a result of the services they received. Consumers at Washington (40%) and Chittenden (39%), however, were less positive about their outcomes (see pages 29 and 32).

Consumer Evaluation of Quality

Young people's ratings of the quality of the programs from which they received services, our third composite measure, was derived from responses to three fixed alternative questions:

The services I received from at <*Community Mental Health Center Name*> this year were of good quality.
If I needed mental health services in the future, I would use this mental health center again.
I would recommend this mental health center to a friend who needed help.

Statewide, almost two thirds (65%) of the young people rated their Child and Adolescent Mental Health Programs favorably on the Quality scale.

Only one Child and Adolescent Mental Health Programs was significantly different from the statewide average on this scale. The quality of the Child and Adolescent Mental Health Program at Southeast was rated more favorably (95% favorable) than average (see pages 29 and 33).

Consumer Evaluation of Services

Young people's ratings of the services they had received, our fourth composite measure, was derived from responses to seven fixed alternative questions:

I liked the services I received from <*Community Mental Health Center Name>.*
I helped to choose my treatment goals.
I helped to choose my services.
I wanted more services than I got.
I got more services than I wanted.

The location of my mental health services was convenient.
Services were available at times convenient for me.

Statewide, just over one half (54.5%) of the young people rated their Child and Adolescent Mental Health Programs favorably on the *Service* scale. None of the Community Mental Health Centers were significantly different from the statewide average on this scale (see page 29 and 34).

Consumer Evaluation of Staff

Staff, our fifth composite measure is based on responses to six questions:

I liked the staff people who worked with me at <*Community Mental Health Center Name>.*
The staff knew how to help me.
The staff asked me what I wanted/needed.
The staff listened to what I had to say.
Staff respected my wishes about who received information about me.
I felt respected by the staff.

Statewide, over two thirds (70%) of the young people rated their Child and Adolescent Mental Health Programs favorably on the Staff scale. Only one Child and Adolescent Mental Health Program was significantly different from the statewide average on this scale. The staff of the Child and Adolescent Mental Health Program at Lamoille were rated more favorably (95% favorable) than average (see pages 29 and 35).

Consumer Evaluation Based on Open Ended Questions

In order to obtain a more complete understanding of the opinions and concerns of consumers, four open-ended questions were included in the questionnaire:

What do you like most about the mental health services you have received?
What do you dislike about the mental health services you have received?
What services that are not now available would you like to have offered?
Other comments:

Over 75% of all respondents supplemented their responses to fixed alternative questions with written comments. These comments were coded and grouped. Statewide 61% of all respondents made *Positive Comments.* Young people receiving Child and Adolescent Mental Health Programs from Bennington were significantly more likely to offer *Positive Comments* (79% of all respondents), while consumers from Chittenden were significantly less likely to offer *Positive Comments* (46% of all respondents). For details of scores, see pages 29 and 36.

APPENDIX I

LETTERS

Letter to Child and Adolescent Mental Health Program Directors

First cover letter

Follow-up Cover Letter

Memo to: John Smith, Director of Children's Services
Home County Mental Health
101 Main Street
Small Town, VT 05000

From: Alice Maynard, Coordinator
Quality Assurance and Improvement

Date: September 17, 1999

Re: **State Level Youth Satisfaction Survey Update**

As mentioned at Children's Directors meetings during the past year, the Child, Adolescent, and Family Unit has been developing satisfaction surveys as part of its system of outcomes and indicators and of quality assurance and improvement. At this time we are ready to begin conducting our Youth Satisfaction Survey.

I have enclosed a copy of the survey and the cover letter which we will be mailing. We ask that you share this information with your staff and, if youth inquire about having received a survey, that your staff will encourage them to complete their survey and mail it in.

We will be mailing surveys to young people aged 14 to 21 who have received Medicaid reimbursed services from a community mental health center between January I and June 30, 1999. We will mail to youth in one community mental health center per week; a follow-up letter will be sent three weeks later to any youth who have not replied. I will call to let you know when we are about to mail to your region.

Much thought has gone in to the development of this survey. It is based on several nationally developed youth satisfaction surveys, experience with Vermont's adult consumer satisfaction survey, input from the Vermont Federation of Families for Children's Mental Health, and input from staff in five states trying to develop a survey which will yield comparable information across the country. Eventually we will have three different surveys, one each for youth served, parents of youth served, and stakeholders. We expect to administer them in an on-going cycle of two to three years.

We are looking forward to sharing the results of these surveys with you, comparing our results with your findings of consumer satisfaction, and jointly improving our results and methods over time. If you have questions or comments, please call.

Enc.

September 17, 1999

Sally Smith
123 Sesame Street
Small Town, VT 05000

Dear Sally,

You have been selected from among recipients of mental health services to help us evaluate the services you receive from *Home County Mental Health*. Your opinions and your answers are very important to us. We want to continue to improve the quality of health care received by Vermonters, and we believe that people who participate in services have a special insight into what makes quality health care.

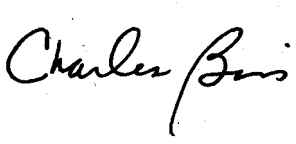
Answering the survey's questions is your choice. *Home County Mental Health* will know that you are participating in the survey.

Your answers to this survey will not be available to anyone other than our research staff. Results will only be reported as rates and percentages for large groups of people; no individuals will be identified. The code on the questionnaire will allow us to link your answers to information about insurance coverage and to assure that you do not receive another survey after you answer this one.

If you would like to receive a summary of the results of this survey, please check the box at the end of the questionnaire. If you have any questions, please feel free to call Alice Maynard at 802-241-2609.

Thank you.

Sincerely,



Charles Biss, Director
Child, Adolescent and Family Unit
Division of Mental Health

Enc.

October 12, 1999

Sally Smith
123 Sesame Street
Small Town, VT 05000

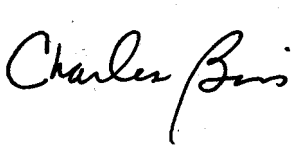
Dear Sally,

I am writing to encourage you to complete and return the survey about community mental health services you received three weeks ago. Your answers to the survey's questions are important to us.

In case you did not receive the original survey or misplaced it, I have enclosed another copy with a pre-addressed and stamped envelope in which to mail it.

Thank you for your help.

Sincerely,



Charles Biss, Director
Child, Adolescent and Family Unit
Division of Mental Health

Enc.

APPENDIX II

VERMONT MENTAL HEALTH SURVEY

Vermont Mental Health Consumer Survey

Please circle the number for each item that best describes your evaluation of the services you received from <*Community Mental Health Center Name*>.

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
Results					
1. The services I received from <*Community Mental Health Center Name*> were helpful to me ……	1	2	3	4	5
As a result of the services I received:					
2. I am better at handling daily life……..	1	2	3	4	5
3. I get along better with my family……..	1	2	3	4	5
4. I get along better with friends and other people……	1	2	3	4	5
5. I am doing better in school and/or at work……	1	2	3	4	5
6. I am better at handling stressful situations……	1	2	3	4	5
Services					
7. I liked the services I received from <*Community Mental Health Center Name*>…….	1	2	3	4	5
8. I helped to choose my treatment goals……..	1	2	3	4	5
9. I helped to choose my services…….	1	2	3	4	5
10. I wanted more services than I got……..	1	2	3	4	5
11. I got more services than I wanted……..	1	2	3	4	5
12. The location of my mental health services was convenient ……..	1	2	3	4	5
13. Services were available at times convenient for me.	1	2	3	4	5
Staff					
14. I liked the staff people who worked with me at *Community Mental Health CenterName*>……	1	2	3	4	5
15. The staff knew how to help me……...	1	2	3	4	5
16. The staff asked me what I wanted/needed……..…	1	2	3	4	5
17. The staff listened to what I had to say……	1	2	3	4	5

- Over -

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
18. Staff respected my wishes about who received information about me……	1	2	3	4	5
19. I felt respected by the staff……..	1	2	3	4	5

Overall Satisfaction

20. The services I received from <*Community Mental Health Center Name*> this year were of good quality…	1	2	3	4	5
21. If I needed mental health services in the future, I would use this mental health center again……..	1	2	3	4	5
22. I would recommend this mental health center to a friend who needed help……	1	2	3	4	5

Comments

23. What was most helpful about the services you received?

24. What was least helpful about the services you received?

25. What could your mental health center do to improve?

26. Other comments?

☐ Please send me a summary of the findings of the survey.

Thank you!

APPENDIX III

DATA COLLECTION

Project Philosophy

Data Collection Procedures

Consumer Concerns

Project Philosophy

This survey was designed with two goals in mind. First, the project was designed to provide an assessment of program performance that would allow a variety of stakeholders to compare the performance of Child and Adolescent Mental Health Programs in Vermont. These stakeholders, who are the intended audience for this report, include consumers, parents, caregivers, program administrators, funding agencies, and members of the general public. The findings of this survey will be an important part of the local agency Designation process conducted by DDMHS. It is hoped that these findings will also support local programs in their ongoing quality improvement process. Second, the project was designed to give young people who receive mental health services a voice and to provide a situation in which that voice would be heard. These two goals led to the selection of research procedures that are notable in three ways.

First, all qualified individuals, not just a sample of qualified individuals, were invited to participate in the evaluation. This approach was selected in order to assure the statistical power necessary to compare even small programs across the state, and to provide all consumers with a voice in the evaluation of their programs.

Second, questionnaires were not anonymous (although all responses are treated as personal/confidential information). An obvious code on each questionnaire allowed the research team to link survey responses with other data about respondents (e.g., age, sex, diagnosis, type and amount of service). This information allowed the research team to identify any non-response bias or bias due to any differences in the caseload of different programs, and to apply analytical techniques that control the effect of the bias. The ability to connect survey responses to personally identifying information also allowed Mental Health Division staff to contact respondents whenever strong complaints were received or potentially serious problems were indicated. In such cases respondents were asked if they wanted Department staff to follow up on their concerns.

Third, sophisticated statistical procedures were used to assure that any apparent differences among programs were not due to differences in caseload characteristics, and to assure measures of statistical significance were sensitive to response rates achieved by this study. Both procedures are described in more detail in Appendix III.

Data Collection Procedures

Questionnaires (see Appendix II) were mailed to every one of the 1,291 young people who received Medicaid reimbursed services from Child and Adolescent Mental Health Programs in Vermont during January through June 1999. The questionnaires were mailed during September 1999 through January 2000 by the Mental Health Division Child and Family Unit central office staff. Each questionnaire was clearly numbered. The cover letter to each client specifically referred to this number, explained its purpose, and assured the potential respondent that his or her personal privacy would be protected (see Appendix I). The stated purpose of the questionnaire numbers was to allow the research team to identify non-respondents for follow-up, and to allow for the linkage of questionnaire responses to the Medicaid databases. (Only one questionnaire was returned with the identification number removed.)

Before any questionnaires were mailed, a letter was sent to every Child and Adolescent Mental Health Program director. This letter described the project and asked the program directors to identify any clients for whom receipt of the questionnaire "could cause serious problems" (see Appendix I). No individuals were identified as being at such risk.

Approximately three weeks after the original questionnaire was mailed, people who had not responded to the first mailing were sent a follow-up letter (see Appendix I). This mailing included a follow-up cover letter, a copy of the original cover letter, and a second copy of the questionnaire.

Useable questionnaires were received from 24% of all potential respondents. About 14% of the questionnaires were returned as undeliverable, and one was returned indicating that the person had died. The adjusted response rate, excluding undeliverable questionnaires and deceased persons, was 28% statewide. Adjusted response rates for individual Child and Adolescent Mental Health varied from 23% to 47%. (See Appendix IV for program by program response rates.) Young people in the 14 and 15 age group were more likely to respond than those in the 16 to 18 age group. There was no difference in the response rates of the young men and women in the target population.

Consumer Concerns

Written comments accompanied more than 75% of all returned questionnaires. Some of these comments expressed concerns of various kinds. Whenever a written comment indicated the possibility of a problem that involved the health or safety of a client, or that involved potential ethical or legal problems, a formal complaint procedure was initiated. Staff of the consumer satisfaction project hand-delivered a copy of the questionnaire to the Division of Mental Health staff person responsible for consumer complaints. Two staff people reviewed each complaint. If follow-up was deemed appropriate, staff contacted the consumer (by telephone or mail) to volunteer the service of the Division staff in regard to the issue.

In this study, only one questionnaire was referred to the Vermont Division of Mental Health. This questionnaire indicated that the respondent was experiencing extreme isolation and depression. This individual and her former case manager were contacted.

APPENDIX IV

ANALYTICAL PROCEDURES

Scale Construction and Characteristics

Scales Based on Fixed Alternative Questions

Positive Narrative Comments

Data Analysis

Finite Population Correction

Case Mix Adjustment

Discussion

Scale Construction

The Vermont survey of young people who had been served by Child and Adolescent Mental Health Programs included twenty-two fixed-alternative questions and four opened-ended questions. Responses to the fixed alternative questions were entered directly into a computer database for analysis. Responses to the open ended questions were coded into twenty-two categories. For purposes of analysis, five scales were constructed from responses to the fixed alternative questions, and a single scale for positive comments provided in responses to the open ended questions. On the fixed alternative questions, responses that indicated consumers " Strongly Agree" or "Agree" with the item were grouped to indicate a positive evaluation of program performance. (Because of wording of the questions, the coding of items 10 an 11 was reversed for scale construction.)

Scales Based on Fixed Alternative Questions

Five scales were derived from the young people's responses to the fixed alternative questions. These scales include a scale that measures consumer's *overall* evaluation of their treatment program, scales that measure consumers' evaluation of the *services* they receive, the *staff* who provided services, and the *quality* of the services received. In addition, a final scale measured the young people's perception of treatment *outcomes*, the impact of the services on their life.

Overall consumer evaluation of Child and Adolescent Mental Health Program performance, our first composite measure, uses all of the 22 fixed alternative questions. After each person's response to each questionnaire item was coded as "positive" or "not positive" the number of items with positive responses for each person was divided by the total number of questions to which the person had responded. Individuals who had responded to less than half of the items included in any scale were excluded from the computation for that scale. (Three young people's ratings (1% of respondents) were excluded for the *Overall, Outcomes* and *Staff* scales, 4 (1.3%) on the *Services* scale and 7 (2.2%) on the *Quality* scale).

Young people's perception of treatment outcomes was measured using responses to five of the fixed alternative questions. The Items that contributed to this scale include:

As a result of the services I received:

2. I am better at handling daily life.
3. I get along better with my family.
4. I get along better with friends and other people.
5. I am doing better in school and/or at work.
6. I am better at handling stressful situations.

The Outcomes scale was constructed for all individuals who had responded to at least three of these items. The scores for the items that were answered were summed and divided by the number of items answered. The results were rounded to an integer

scale with Agree and Strongly Agree coded as positive. The internal consistency of this scale, as measured by average inter-item correlation (Cronbach's Alpha) is .8742.

Quality, our third composite measure was derived from consumer responses to three of the other fixed alternative questions. The Items that contributed to this scale include:

20. The services I received from at <*Community Mental Health Center Name*> this year were of good quality.
21. If I needed mental health services in the future, I would use this mental health center again.
22. I would recommend this mental health center to a friend who needed help.

For a rating to be included, at least two of these questions had to have been answered. The scores for the items that were answered were summed and divided by the number of items answered. The results were rounded to an integer scale with Agree and Strongly Agree coded as positive. The internal consistency of this scale, as measured by average inter-item correlation (Cronbach's Alpha) is .9265.

The *Services* scale, like the *Outcomes* scale, was constructed for all individuals who had responded to more than half (at least 4) of the items used in the scale. The Items that contributed to this scale include:

7. I liked the services I received from <*Community Mental Health Center Name>.*
8. I helped to choose my treatment goals.
9. I helped to choose my services.
10. I wanted more services than I got.
11. I got more services than I wanted.
12. The location of my mental health services was convenient.
13. Services were available at times convenient for me.

Because of wording of the questions, the coding of items 10 an 11 was reversed for scale construction. Thus, responses of 4 or 5 became coded as positive. The scores for the items that were answered were then summed and divided by the number of items answered. The results were rounded to an integer scale with Agree and Strongly Agree coded as positive. The internal consistency of this scale, as measured by average inter-item correlation (Cronbach's Alpha) is .6746.

Staff, our final composite measure, was derived from consumer responses to the six remaining fixed alternative questions. The Items that contributed to this scale include:

14. I liked the staff people who worked with me at<*Community Mental Health Center Name>.*
15. The staff knew how to help me.
16. The staff asked me what I wanted/needed.
17. The staff listened to what I had to say.
18. Staff respected my wishes about who received information about me.
19. I felt respected by the staff.

For a rating to be included, at least four of these questions had to have been answered. The scores for the items that were answered were summed and divided by the number of items answered. The results were rounded to an integer scale with Agree and Strongly Agree coded as positive. The internal consistency of this scale, as measured by average inter-item correlation (Cronbach's Alpha) is .9319.

Positive Narrative Comments

In order to obtain a more complete understanding of the opinions and concerns of consumers of Child and Adolescent Mental Health Programs in Vermont, four open-ended questions were included in the questionnaire:

23. What was most helpful about the services you received?
24. What was least helpful about the services you received?
25. What could your mental health center do to improve?
26. Other comments?

Two hundred and thirty young consumers (75% of all respondents) supplemented their responses to fixed alternative questions with written comments. These written responses were coded and grouped to provide a further indicator of consumer satisfaction with Child and Adolescent Mental Health Programs.

The primary indicator derived from consumer responses to the open ended questions was the proportion of all respondents who made positive comments about their Child and Adolescent Mental Health Programs.

Data Analysis

In order to provide a more valid basis for comparison of the performance of Vermont's ten Child and Adolescent Mental Health Programs, two statistical correction/ adjustment procedures were incorporated into the data analysis. First, a "finite population correction" was applied to results to adjust for the high proportion of all potential respondents who returned useable questionnaires. Second, a statistical "case mix adjustment" helped to eliminate any bias that might be introduced by dissimilarities among the client populations served by different community programs.

Finite Population Correction

Consumer satisfaction surveys, intended to provide information on a finite number of people who are served by community mental health programs, can achieve a variety of response rates. Just under 30% of all potential respondents to this survey, for instance, returned useable questionnaires. When responses are received from a substantial proportion of all potential subjects, standard techniques for determining confidence intervals overstate the uncertainty of the results. The standard procedure for deriving 95% confidence intervals for survey results assumes an infinite population represented by a small number of observations. This confidence interval is derived by multiplying the standard error of the mean for the sample by 1.96.

In order to correct this confidence interval for studies in which a substantial proportion of all potential respondents is represented, a "finite population correction" can be added to the computation. The corrected confidence interval is derived by multiplying the uncorrected confidence interval by $\sqrt{1 - n/N}$, where n is the number of observations and N is the total population under examination.

The statistical significance of all findings in the body of this report have been computed using this finite population correction.

Case-mix Adjustment

In order to compare the performance of Vermont's Child and Adolescent Mental Health Programs, each of the six measures of consumer satisfaction described above were statistically adjusted to account for differences in the case-mix of the ten programs. This process involved three steps. First, client characteristics that were statistically related to variation in consumer evaluation of Child and Adolescent Mental Health Programs were identified. The client characteristics that were tested include gender, age, state custody (yes/no), and diagnosis (affective disorder, adjustment disorder or attention deficit and hyperactivity disorder). Second, statistically significant differences in the caseloads of the community programs were identified and compared to the variables that were related to variation in consumer ratings of program performance. Finally, variables that were statistically related to both response rates and satisfaction with services were used to adjust the raw measures of satisfaction for each community program. The relationship of each of our six scales to client characteristics and the variation of each across programs is described in the following table:

Risk Adjustment: Statistical Significance of Relationships

Potential Risk Adjustment Factors	Agency Case Mix	Scales					Positive Comments
		Overall	Outcomes	Quality	Services	Staff	
Gender	0.12	0.401	**0.072**	0.642	**0.076**	0.553	**0.01**
Age	0.414	0.381	0.566	0.814	0.758	0.553	0.625
SRS Custody	**0.009**	0.771	**0.069**	0.485	0.854	0.109	0.119
Affective Disorder	**0.004**	0.996	**0.004**	0.868	0.263	0.617	0.179
Adjustment Disorder	**0.000**	0.197	**0.023**	**0.005**	0.19	**0.044**	0.735
ADHD	**0.018**	0.801	0.301	0.158	0.41	0.52	**0.068**

Four of the six potential risk adjustment factors were found to vary among Child and Adolescent Mental Health Programs at a statistically significant level (p.<.10). These factors

include custody status and the proportion having diagnoses of affective disorder, adjustment disorder and attention deficit or hyperactivity disorder (ADHD). Programs did not differ in the age or gender of the young people they served.

The *Outcomes* scale was significantly related to state custody status, having a diagnosis of affective disorder or a diagnosis of adjustment disorder. The *Quality* and *Staff* scales were significantly related to a having a diagnosis of adjustment disorder. Young people in state custody or those with diagnoses of affective disorder rated their Child and Adolescent Mental Health Programs less favorably on these scales. Young people with adjustment disorder or tended to view the programs more favorably. Because scores on these scales varied among programs and were related to the risk factors, the scales were risk adjusted before scores for different programs were compared.

The scale derived from consumers' narrative comments (*Positive Comments)* was significantly related to having a diagnosis of ADHD, a factor that varied among programs. The score for this scale was also adjusted before scores for different children's programs were compared.

Three of the scales based on the fixed alternative questions (*outcomes, services* and *positive comments)* were related to consumer gender. However, since the proportions of males and females across the ten Child and Adolescent Mental Health Programs did not differ significantly, none of these scales needed to be risk adjusted for gender.

Whenever a statistical adjustment of survey results was necessary to provide an unbiased comparison of Child and Adolescent Mental Health Programs, the analysis followed a four step process. First, the respondents from each community program were divided into the number of categories resulting from the combination of risk factors. When a custody status alone is required, two categories are used. When custody status (two categories) and adjustment disorder (two categories) adjustments are both indicated, four categories result. Second, the average (mean) consumer rating was determined for each of these categories. Third, the proportion of all Child and Adolescent Mental Health Program clients, statewide, who fell into each category was determined. Finally, the average consumer rating for each category was multiplied by the statewide proportion of all potential respondents who fell into that category, and the results were summed to provide a measure of consumer rating that is free of the influence of differences in the characteristics of consumers across programs.

Mathematically, this analytical process is expressed by the following formula:

$$\sum w_i \overline{X_i}$$

Where "w_i " is the proportion of all potential respondents who fall into age category "i", and "$\overline{X_i}$" is the average level of satisfaction for people in age group "i.

When one of the categories used in this analysis includes no responses, it is necessary to reconsider if the difference between the caseload of a specific program and the caseload of other programs in the state is too great to allow for statistical case mix adjustment. If it is

decided that the difference is within reason, the empty category was collapsed into an adjacent category and the process described above was repeated using the smaller set of categories.

Discussion

Both of the statistical adjustments/corrections used in this evaluation allowed the analysis to take into account the methodological strengths and shortcomings of the survey and the unique characteristics of Vermont's Community Mental Health Programs. Finite population correction provides the narrower confidence intervals that are appropriate to a study, which obtains responses from a large proportion of all potential respondents. Statistical adjustment for difference in case-mix allows researchers and program evaluators to appropriately compare the performance of programs that serve people with different demographic and clinical characteristics, and different patterns of service utilization.

In the Vermont Youth Survey, the finite population correction had a small impact on the statistical significance of the results of the consumer satisfaction survey. The statistical adjustment designed to correct for differences in case mix across provider organizations had some impact on the survey results. This pattern is the result of specific characteristics of the Vermont survey and the Vermont system of care. The Vermont survey had a moderate response rate, and there was very little difference in the client populations of the ten programs in areas that were related to consumer satisfaction. The relative impact of these statistical adjustments will be very different in situations where response rates are higher and/or case mix differences are more substantial.

APPENDIX V

TABLES AND FIGURES

Response Rates by Program

Positive Responses to Individual Questions by Program

Positive Scale Scores by Program

Provider Comparisons

Table 1

Response Rates by Program

Evaluation of Child and Adolescent Mental Health Programs
By Young People Served in Vermont January - June 1999

	Children Served	Children 14-18 Served		Children 14-18 on Medicaid		Deliverable Surveys		Completed Surveys	
	#	#	% of all	#	% of 14-18	#	% of eligibles	#	% of deliverables
Statewide	5767	2194	38%	1291	59%	1112	86%	314	28%
Agency									
Addison	589	245	42%	146	60%	127	87%	31	24%
Bennington	402	181	45%	94	52%	79	84%	19	24%
Chittenden	998	387	39%	207	53%	179	86%	45	25%
Lamoille	118	48	41%	62	129%	53	85%	12	23%
Northeast	781	291	37%	218	75%	188	86%	54	29%
Northwest	454	159	35%	50	31%	43	86%	20	47%
Orange	406	131	32%	85	65%	75	88%	20	27%
Rutland	528	214	41%	101	47%	87	86%	23	26%
Southeast	1054	380	36%	205	54%	176	86%	58	33%
Washington	437	156	36%	123	79%	105	85%	32	30%
Gender									
Male	3365	1139	34%	658	58%	558	85%	158	28%
Female	2410	1055	44%	633	60%	554	88%	156	28%
Age									
14-15 years	1084	1084	100%	667	62%	588	88%	181	31%
16-18 years	1110	1110	100%	624	56%	524	84%	133	25%

Table 2

Positive Responses to Individual Questions by Program

	State	Addison	Bennington	Chittenden	Lamoille	Northeast	Northwest	Orange	Rutland	Southeast	Washington
The staff listened to what I had to say	**77%**	77%	79%	80%	92%	70%	79%	85%	83%	78%	66%
I liked the staff people who worked with me	**76%**	65%	79%	84%	92%	74%	74%	75%	83%	78%	66%
The location of my mental health services was convenient	**72%**	63%	79%	48%	83%	78%	58%	70%	83%	84%	75%
Staff respected my wishes about who received information about me	**72%**	65%	68%	80%	92%	59%	53%	80%	83%	76%	75%
I felt respected by the staff	**72%**	71%	53%	82%	83%	67%	68%	85%	78%	74%	66%
The staff asked me what I wanted/needed	**69%**	55%	74%	70%	75%	67%	74%	70%	87%	69%	63%
Services were available at times convenient for me.	**68%**	71%	74%	59%	67%	59%	63%	70%	74%	76%	72%
The services I received were of good quality	**67%**	58%	74%	68%	75%	59%	79%	75%	70%	71%	63%
I would recommend this mental health center to a friend who needed help	**67%**	71%	74%	70%	67%	57%	74%	80%	74%	62%	63%
The services I received were helpful to me	**66%**	52%	79%	71%	64%	60%	74%	65%	57%	76%	59%
I get along better with friends and other people as a result of the services I received	**65%**	61%	63%	60%	58%	61%	68%	80%	43%	71%	75%
I liked the services I received	**64%**	48%	79%	71%	83%	59%	68%	50%	64%	67%	66%
The staff knew how to help me	**63%**	45%	74%	75%	75%	54%	74%	55%	65%	64%	63%
If I needed mental health services in the future, I would use this mental health center again	**62%**	45%	63%	64%	58%	56%	74%	70%	74%	64%	66%
I helped to choose my treatment goals	**61%**	61%	63%	58%	42%	59%	53%	75%	70%	63%	63%
I am doing better in school and/or at work as a result of the services I received	**60%**	55%	63%	67%	75%	54%	58%	55%	57%	66%	53%
I am better at handling daily life as a result of the services I received	**58%**	58%	42%	60%	83%	59%	58%	70%	52%	52%	63%
I get along better with my family as a result of the services I received	**57%**	48%	53%	51%	75%	52%	68%	75%	61%	52%	66%
I am better at handling stressful situations as a result of the services I received	**52%**	52%	47%	36%	50%	57%	68%	55%	52%	53%	53%
I helped to choose my services	**50%**	48%	47%	43%	67%	43%	53%	55%	57%	55%	50%
I wanted more services than I got	**46%**	58%	53%	36%	42%	48%	37%	65%	43%	48%	38%
I got more services than I wanted	**40%**	35%	32%	43%	42%	48%	26%	50%	39%	47%	25%
Average	**63%**	**57%**	**64%**	**63%**	**70%**	**59%**	**64%**	**69%**	**66%**	**66%**	**61%**

Table 3

Positive Scale Scores by Program

Evaluation of Child and Adolescent Mental Health Programs By Young People Served in Vermont January - June 1999						
Region	Overall	Outcomes	Quality	Services	Staff	Comments
Statewide	66%	59%	65%	55%	70%	61%
Lamoille	83%	**96%**	53%	50%	**95%**	52%
Bennington	68%	39%	72%	63%	76%	**79%**
Southeast	69%	57%	**74%**	64%	75%	66%
Addison	52%	51%	51%	52%	58%	58%
Northeast	57%	50%	59%	53%	63%	65%
Northwest	68%	72%	77%	42%	73%	60%
Orange	75%	79%	65%	70%	70%	66%
Rutland	74%	45%	68%	52%	72%	64%
Washington	63%	**40%**	63%	56%	67%	53%
Chittenden	67%	**39%**	65%	42%	73%	**46%**

Rates in bold typeface are significantly different from statewide average ($p < .05$)

PROVIDER COMPARISONS

Positive Overall Evaluation

Positive Evaluation of Outcomes

Positive Evaluation of Quality

Positive Evaluation of Services

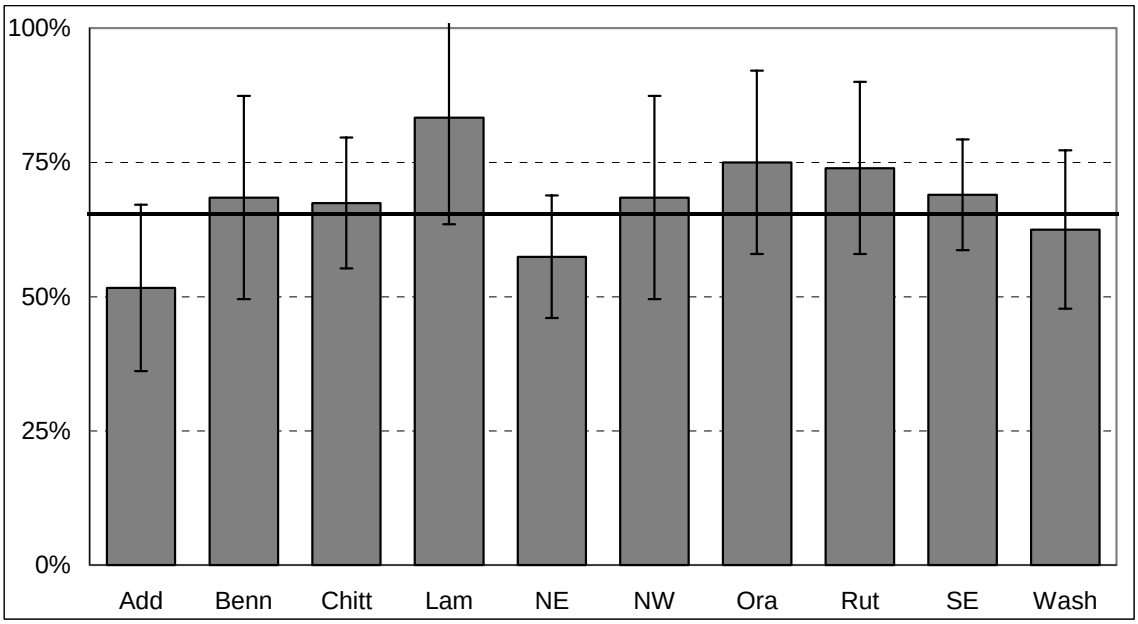
Positive Evaluation of Staff

Positive Narrative Comments

Positive Evaluation of Programs

Positive Overall Evaluation

Young People Served by Child and Adolescent Mental Health Programs in Vermont

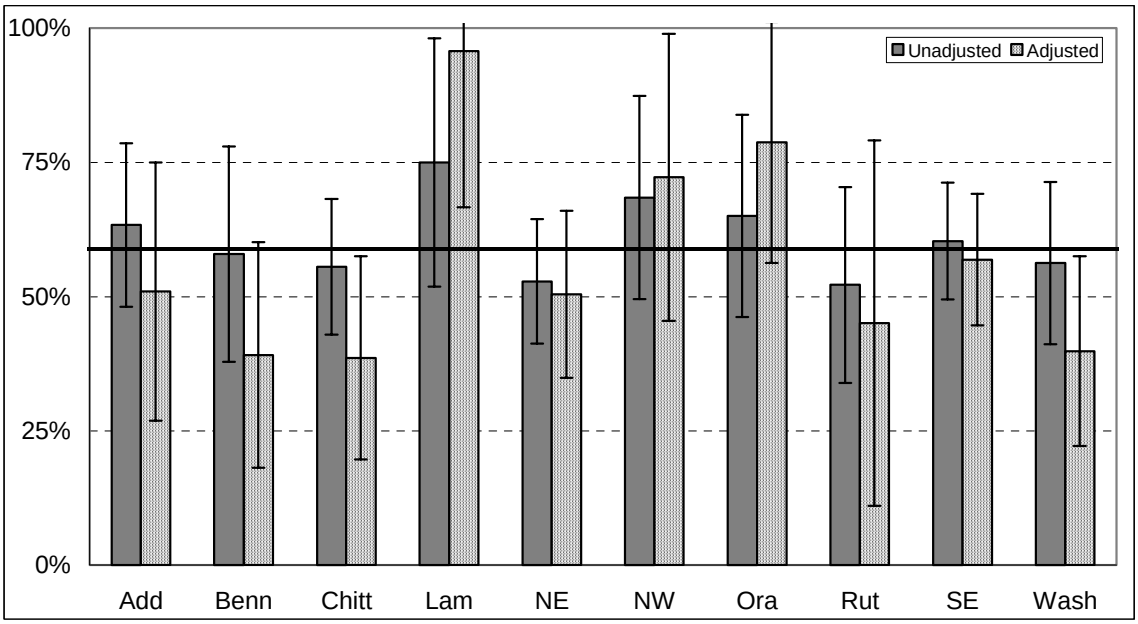


Agency	# Respondents	# Positive Responses	% Positive Responses	Confidence Interval	Significance*
Addison	31	16	52%	(36%-67%)	n.s.
Bennington	19	13	68%	(50%-87%)	n.s.
Chittenden	43	29	67%	(55%-80%)	n.s.
Lamoille	12	10	83%	(63%-103%)	n.s.
Northeast	54	31	57%	(46%-69%)	n.s.
Northwest	19	13	68%	(50%-87%)	n.s.
Orange	20	15	75%	(58%-92%)	n.s.
Rutland	23	17	74%	(58%-90%)	n.s.
Southeast	58	40	69%	(59%-79%)	n.s.
Washington	32	20	63%	(48%-77%)	n.s.
Statewide	311	204	66%	(61%-70%)	

* Denotes that ratings given by young people in this agency are significantly different to the statewide average

Positive Evaluation of Outcomes

Young People Served by Child and Adolescent Mental Health Programs in Vermont



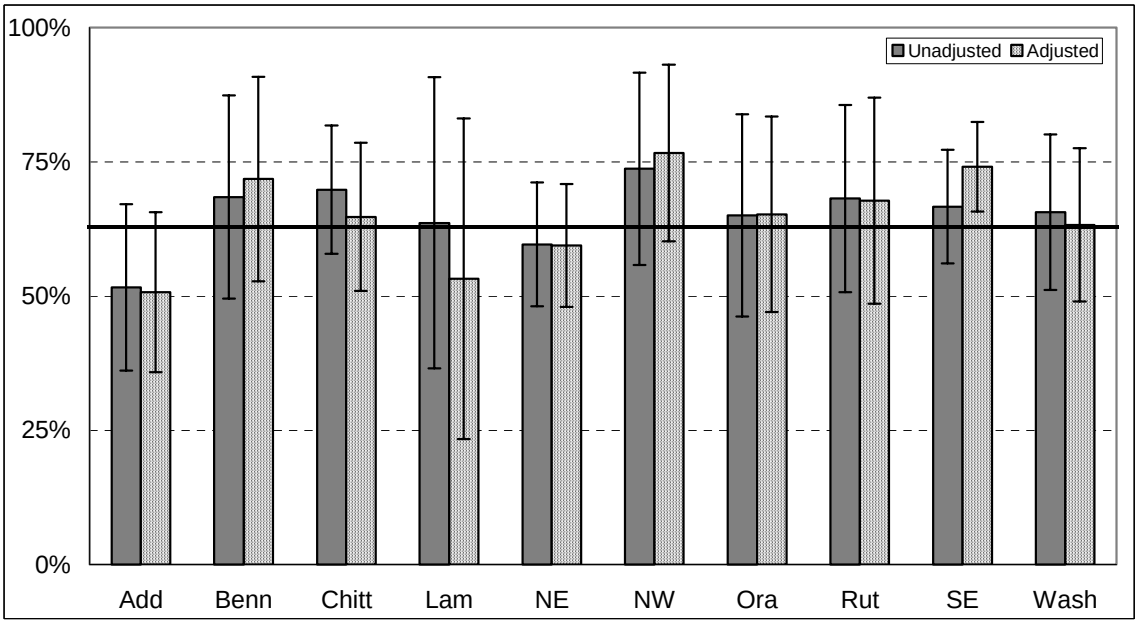
Agency	# Respondents	# Positive Responses	Adj. % Positive Responses	Confidence Interval	Significance*
Addison	30	19	51%	(27%-75%)	n.s.
Bennington	19	11	39%	(18%-60%)	n.s.
Chittenden	45	25	39%	(20%-58%)	*
Lamoille	12	9	96%	(67%-125%)	*
Northeast	53	28	50%	(35%-66%)	n.s.
Northwest	19	13	72%	(45%-99%)	n.s.
Orange	20	13	79%	(56%-101%)	n.s.
Rutland	23	12	45%	(11%-79%)	n.s.
Southeast	58	35	57%	(45%-69%)	n.s.
Washington	32	18	40%	(22%-58%)	*
Statewide	311	183	59%	(54%-63%)	

% positive scores adjusted to account for differences between agencies in numbers of young people in state custody, and with diagnoses of adjustment and affective disorder

* Denotes that ratings given by young people in this agency are significantly different to the statewide average

Positive Evaluation of Quality

Young People Served by Child and Adolescent Mental Health Programs in Vermont



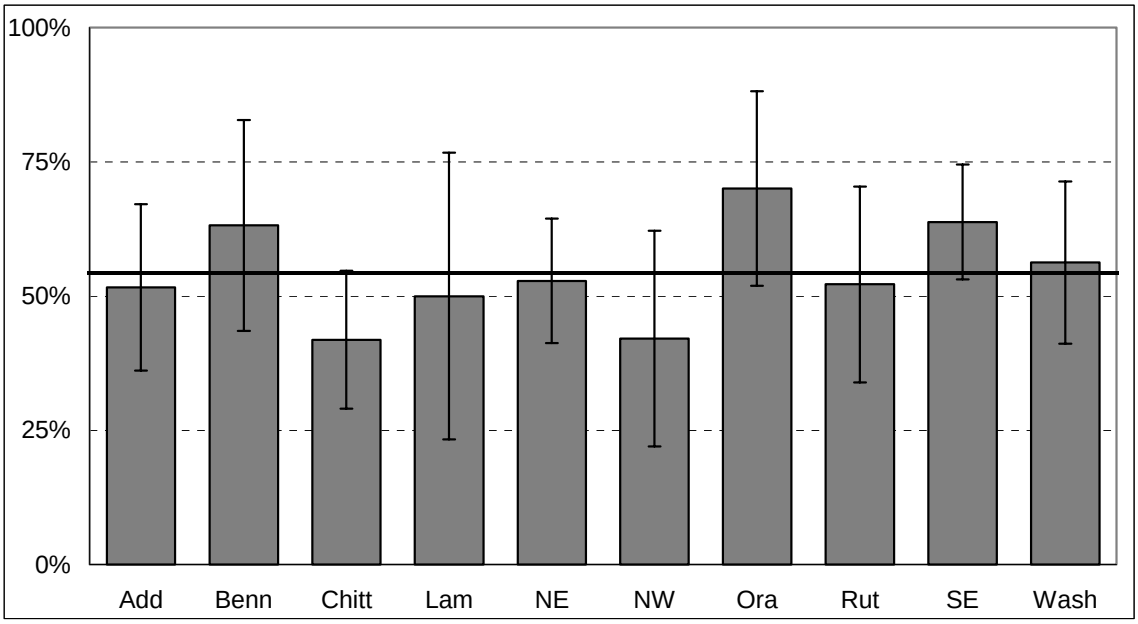
Agency	# Respondents	# Positive Responses	Adj. % Positive Responses	Confidence Interval	Significance*
Addison	31	16	51%	(36%-66%)	n.s.
Bennington	19	13	72%	(53%-91%)	n.s.
Chittenden	43	30	65%	(51%-79%)	n.s.
Lamoille	11	7	53%	(23%-83%)	n.s.
Northeast	52	31	59%	(48%-71%)	n.s.
Northwest	19	14	77%	(60%-93%)	n.s.
Orange	20	13	65%	(47%-83%)	n.s.
Rutland	22	15	68%	(49%-87%)	n.s.
Southeast	57	38	74%	(66%-82%)	*
Washington	32	21	63%	(49%-78%)	n.s.
Statewide	306	198	65%	(60%-69%)	

% positive scores adjusted to account for differences between agencies in numbers of young people with diagnosis of adjustment disorder

* Denotes that ratings given by young people in this agency are significantly different to the statewide average

Positive Evaluation of Services

Young People Served by Child and Adolescent Mental Health Programs in Vermont

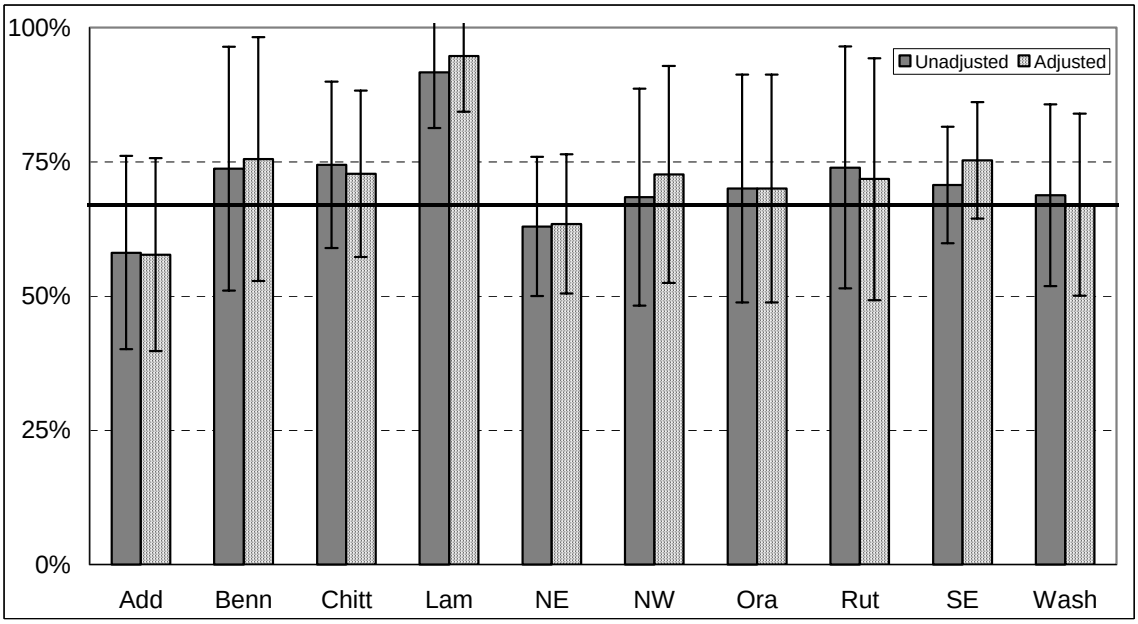


Agency	# Respondents	# Positive Responses	% Positive Responses	Confidence Interval	Significance*
Addison	31	16	52%	(36%-67%)	n.s.
Bennington	19	12	63%	(44%-83%)	n.s.
Chittenden	43	18	42%	(29%-55%)	n.s.
Lamoille	12	6	50%	(23%-77%)	n.s.
Northeast	53	28	53%	(41%-64%)	n.s.
Northwest	19	8	42%	(22%-62%)	n.s.
Orange	20	14	70%	(52%-88%)	n.s.
Rutland	23	12	52%	(34%-70%)	n.s.
Southeast	58	37	64%	(53%-74%)	n.s.
Washington	32	18	56%	(41%-71%)	n.s.
Statewide	310	169	55%	(50%-59%)	

* Denotes that ratings given by young people in this agency are significantly different to the statewide average

Positive Evaluation of Staff

Young People Served by Child and Adolescent Mental Health Programs in Vermont



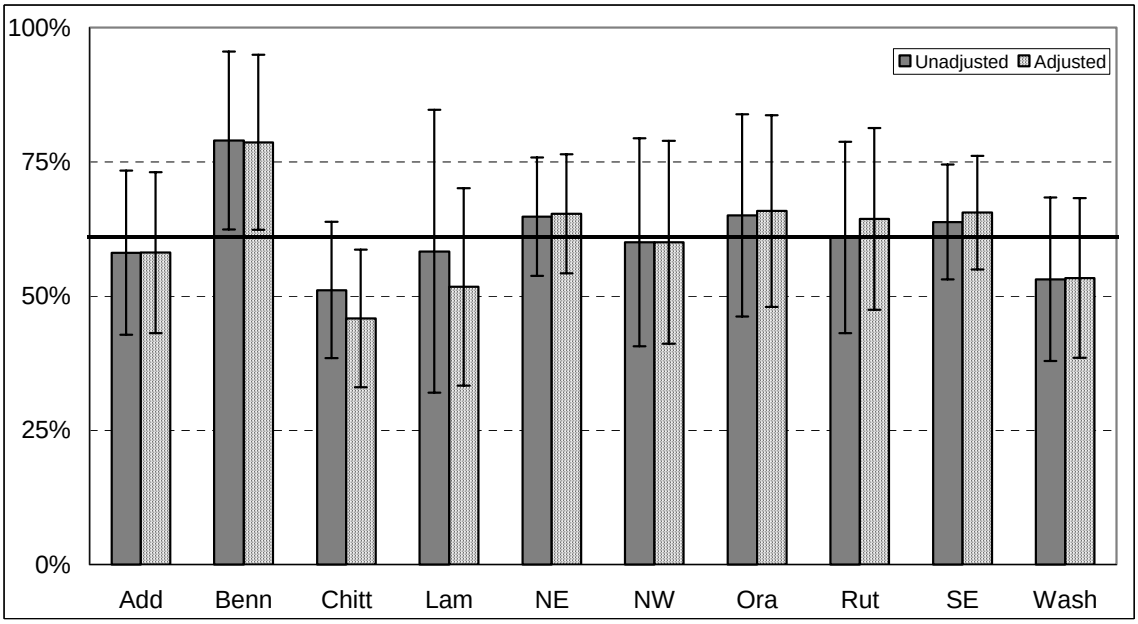
Agency	# Respondents	# Positive Responses	Adj. % Positive Responses	Confidence Interval	Significance*
Addison	31	18	58%	(40%-76%)	n.s.
Bennington	19	14	76%	(53%-98%)	n.s.
Chittenden	43	32	73%	(57%-88%)	n.s.
Lamoille	12	11	95%	(84%-105%)	*
Northeast	54	34	63%	(50%-76%)	n.s.
Northwest	19	13	73%	(52%-93%)	n.s.
Orange	20	14	70%	(49%-91%)	n.s.
Rutland	23	17	72%	(49%-94%)	n.s.
Southeast	58	41	75%	(64%-86%)	n.s.
Washington	32	22	67%	(50%-84%)	n.s.
Statewide	311	216	69%	(60%-69%)	

% positive scores adjusted to account for differences between agencies in numbers of young people with diagnosis of adjustment disorder

* Denotes that ratings given by young people in this agency are significantly different to the statewide average

Positive Narrative Comments

Young People Served by Child and Adolescent Mental Health Programs in Vermont

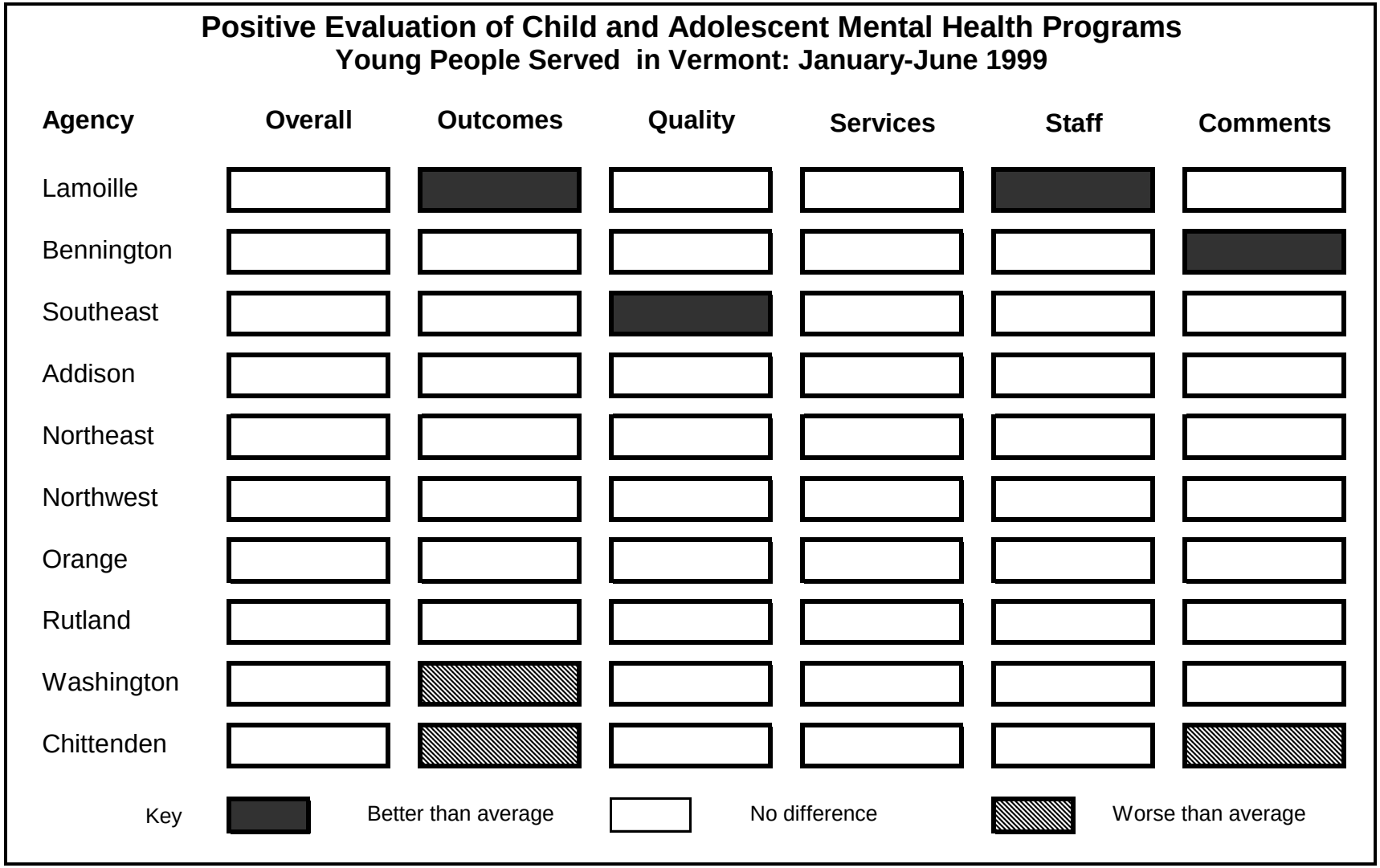


Agency	# Respondents	# Positive Responses	Adj. % Positive Responses	Confidence Interval	Significance*
Addison	31	18	58%	(43%-73%)	n.s.
Bennington	19	15	79%	(62%-95%)	*
Chittenden	45	23	46%	(33%-59%)	*
Lamoille	12	7	52%	(33%-70%)	n.s.
Northeast	54	35	65%	(54%-76%)	n.s.
Northwest	20	12	60%	(41%-79%)	n.s.
Orange	20	13	66%	(48%-84%)	n.s.
Rutland	23	14	64%	(47%-81%)	n.s.
Southeast	58	37	66%	(55%-76%)	n.s.
Washington	32	17	53%	(39%-68%)	n.s.
Statewide	314	191	61%	(56%-65%)	

% positive scores adjusted to account for differences between agencies in numbers of young people with diagnosis of ADHD

* Denotes that ratings given by young people in this agency are significantly different to the statewide average

Positive Evaluation of Child and Adolescent Mental Health Programs
Young People Served in Vermont: January-June 1999



APPENDIX VI

CHILD AND ADOLESCENT MENTAL HEALTH PROGRAMS IN VERMONT

This report provides assessments of the ten regional Child and Adolescent Mental Health Programs that are designated by the Vermont Department of Developmental and Mental Health Services. Child and Adolescent Mental Health Programs serve children and families who are undergoing emotional or psychological distress or are having problems adjusting to changing life situations. These programs primarily provide outpatient services (individual, group and family therapy, and diagnostic services), although many agencies also provide residential services for children and adolescents who have a severe emotional disturbance. Throughout this report, these Child and Adolescent Mental Health Programs have been referred to by the name of the region that they serve. The full name and location of the designated agency with which each of these programs is associated are provided below.

Addison, Counseling Service of Addison County in Middlebury.

Bennington, United Counseling Services in Bennington.

Chittenden, Howard Center for Human Services in Burlington.

Lamoille, Lamoille County Mental Health Services in Morrisville.

Northeast, Northeast Kingdom Mental Health in Newport and St. Johnsbury.

Northwest, Northwestern Counseling and Support Services in St. Albans.

Orange, Clara Martin Center in Randolph.

Rutland, Rutland Mental Health Services in Rutland.

Southeast, Health Care and Rehabilitation Services of Southeastern Vermont in Bellows Falls.

Washington, Washington County Mental Health Services in Berlin and Barre.